Remarks

Summary of the Office Action

Claims 1-68 were pending in this application.

Corresponding method, means-plus-function, and system claims were objected to as being substantial duplicates of one another.

Claims 52-68 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

Claims 1-68 were rejected under 35 U.S.C. § 102(e) as being anticipated by Vallone et al. U.S. Patent No. 6,847,778 (hereinafter "Vallone").

II. Summary of Applicants' Reply

Applicants have amended claims 1, 8, 15, 18, 25, 32, 35, 42, and 49 to more particularly define the claimed invention. Applicants have also canceled claims 52-68 without prejudice and added new claims 69-98. No new matter has been added, and the amendments and the new claims are fully supported by the originally filed application. See, for example, applicants' specification, p. 71, 1. 16 through p. 74, 1. 22; p. 85, 1. 23 through p. 88, 1. 8; and FIGS. 33-35 and 44-46.

III. Applicants' Reply to the Claim Objections

The Examiner objected to various corresponding method, means-plus-function, and system claims as being substantial duplicates of one another (see Office Action, pp. 2-4).

Applicants respectfully submit that this objection is improper.

In particular, applicants respectfully submit that corresponding methods, means-plus-function, and system claims differ at least

in scope and do not merely "cover the same thing," as contended by the Examiner. "[C]ourt decisions have confirmed applicant's right to restate (i.e., by plural claiming) the invention in a reasonable number of ways. Indeed, a mere difference in scope between claims has been held to be enough." MPEP § 706,03(k). Accordingly, applicants respectfully request that the claim objections be withdrawn.

IV. Applicants' Reply to the § 101 Rejection

The Examiner rejected applicants' previously pending claims 52-68 as being directed to non-statutory subject matter. In particular, on page 4 of the Office Action, the Examiner contends that claims 52-68 directed to machine-readable media do not fall within a statutory category of invention as defined by 35 U.S.C. § 101. Applicants respectfully disagree. However, in the interest of advancing prosecution, applicants have canceled claims 52-68 and request that the § 101 rejection of claims 52-68 be withdrawn.

V. Applicants' Reply to the § 102 Rejection of Claims 1-7, 18-24, and 35-41

Applicants' independent claims 1, 18, and 35 are directed to a method and systems for providing information about a currently broadcasting program. The currently broadcasting program is displayed. A start time and an end time associated with the currently broadcasting program are determined. A transport control interface indicating a time length of the currently broadcast program is then displayed. The transport control interface also indicates at least one time segment of

the time length of the currently broadcasting program that has been recorded.

Applicants' FIG. 32, for example, shows one embodiment of a transport control interface in the form of a transport control bar. The start time of the currently broadcasting program is 7:00PM and the end time of the current program is 8:30PM. These start and end times are displayed on the left and right side of the transport control bar, respectively. The bar therefore indicates the length of the current program (e.g., 1.5 hours), while a buffer region 3204 displayed in the transport control bar indicates the portion of the current program that has been buffered (see applicants' specification at p. 67, 1. 23 through p. 68, 1. 12 and p. 69, 1. 7-31. and FIG. 32)

The Examiner contends that Vallone shows all of the features of applicant's independent claims 1, 18, and 35. The Examiner cites to Vallone's trick play bar, and in particular to col. 18, 11. 39-54 and FIGS. 26 and 27, in support of his assertion that Vallone shows providing a transport control interface that indicates a time length of the currently broadcasting program. Applicants respectfully disagree with the Examiner's contentions.

Contrary to the Examiner's contentions, Vallone fails to disclose a transport control interface that indicates a time length of the current broadcasting program. Vallone's trick play bar is used only to inform a user of "the size of the circular cache ... and how much of the cache is filled" (col. 18, 11. 32-35). In particular, Vallone describes a trick play bar that is displayed such that the right half of the bar

represents half an hour, while the time scale of the left half of the bar is based on the size of the circular cache (see col. 19, ll. 15-21). Thus, Vallone discloses the use of a trick play bar whose left and right time boundaries shift to more easily indicate how much of a circular cache is currently filled at any particular time. Nowhere does Vallone show or suggest that the displayed times or time increments in the trick play bar are based on the start and end times of the currently broadcasting program.

Indeed, Vallone's trick play bar does not provide any information about a currently broadcasting program other than in relation to the circular cache that may be used to buffer the currently broadcasting program. For a user to obtain information about the currently broadcasting program, a user of Vallone's system would have to invoke an interface that is completely separate from the trick play bar, such as a banner that can display varying levels of information about the program (see col. 16, 11. 49-67). Applicants' claimed invention, on the other hand, provides a single convenient interface - a transport control interface - which provides a user not only with information on the amount of content that has been buffered, but also information on the currently broadcasting program itself. In particular, applicants' independent claims 1, 18, and 35 patentably improve upon Vallone by providing a transport control interface that indicates (1) a time length of the currently broadcasting program, and (2) at least one time segment of the time length of the currently broadcasting program that has been recorded.

For at least the foregoing reasons, applicants respectfully submit that independent claims 1, 18, and 35, as well as dependent claims 2-7, 19-24, and 36-41, which depend therefrom, are allowable over Vallone. Applicants respectfully request that the § 102 rejection of claims 1-7, 18-24, and 35-41 over Vallone be withdrawn.

VI. Applicants' Reply to the § 102 Rejection of Claims 8-14, 25-31, and 42-48

Applicants' independent claims 8, 25, and 42 are directed to a method and systems for providing information about at least two programs. A currently broadcasting program and a transport control interface are displayed. The transport control interface indicates a first time segment associated with the recording of the currently broadcasting program. When playing of the currently broadcasting program is finished, the end of the playing is determined, and the subsequent broadcasting program is displayed. The transport control interface is also modified in response to determining that playing of the currently broadcast program is finished. The transport control interface is modified to indicate the first time segment as well as a second time segment associated with the recording of the subsequent broadcasting program.

Applicants' FIGS. 33 and 35 illustrate one way in which a transport control interface may be modified in response to determining that playing of the currently broadcasting program is finished. In particular, FIG. 33 may represent a transport control interface that is displayed while a currently broadcasting program that ends at 8:30PM is playing. In

response to determining that the playing of this program has finished, the transport control interface may be modified to display a different, 9:00PM end time that is associated with the end time of the subsequent program (see applicants' specification at p. 73, 1. 21 through p. 74, 1. 3 and FIGS. 33 and 35).

The Examiner contends that Vallone shows all of the elements of applicants' claims 8, 25, and 42 prior to amendment. On page 7 of the Office Action, the Examiner contends that previously pending claims 8, 25, and 42 are substantially similar to claim 1 and rejected for substantially the same reasons, pointing also to Vallone's FIGS. 3-6 and the corresponding text. Applicants respectfully traverse this assertion.

Applicants respectfully submit that Vallone fails to modify its trick play bar in response to determining that playing of a currently broadcasting program is finished.

Vallone merely discloses that the cache bar shifts every half an hour - or equivalently, when the cache bar reaches the right side of the trick play bar (see col. 18, 11. 46-47 and col. 19, 11. 4-14). Vallone does not show or suggest that the frequency or amount by which the cache bar shifts depends on whether playing of the currently broadcasting program has finished, as required by applicants' claimed invention.

Additionally, the disclosure of Vallone's FIGS. 3-6, which relates to the mechanism of how events are used to generate logical segments that point to the circular buffer, fails to make up the deficiency of Vallone's discussion of the

trick play bar in failing to show or suggest the claimed invention

In view of the foregoing, applicants respectfully submit that independent claims 8, 25, and 42, as well as dependent claims 9-14, 26-31, and 43-48, which depend therefrom, are allowable over Vallone. Applicants respectfully request that the § 102 rejection of claims 8-14, 25-31, and 42-48 over Vallone be withdrawn.

VII. Applicants' Reply to the § 102 Rejection of Claims 15-17, 32-34, and 49-51

Applicants' independent claims 15, 32, and 49 are directed to a method and systems for providing information about a program. The program and a transport control interface are displayed. The transport control interface indicates a time segment associated with a recording of the program. The transport control interface also indicates programming information for the program. Applicants' FIG. 39, for example, shows one embodiment of such a transport control interface. This transport control interface includes programming information, such as the title and channel of the displayed program.

The Examiner contends that Vallone discloses all of the above features of applicants' independent claims 15, 32, and 49. In particular, on page 8 of the Office Action, the Examiner cites to Vallone's trick play bar, and contends that the trick play bar is functionally equivalent to applicants' claimed transport control interface. Applicants respectfully disagree. Applicants have shown above in Section V that

Vallone's trick play bar does provide information related to the program that is displayed. Rather, Vallone's trick play bar merely informs the user of the size of a circular cache used to buffer video and how much of the circular cache has been filled. As a consequence of this, Vallone fails to show or suggest displaying a transport control interface that indicates programming information associated with the program, as required by applicants' independent claims 15, 32, and 49.

In view of the foregoing, applicants respectfully submit that independent claims 15, 32, and 49, and dependent claims 16, 17, 33, 34, 50, and 51, which depend therefrom, are allowable over Vallone. Applicants respectfully request that the § 102 rejection of claims 15-17, 32-34, and 49-51 over Vallone be withdrawn.

VIII. New Claims 69-98

Applicants have added new claims 69-98. No new matter has been added by these new claims, and the new claims are fully supported by the originally filed application. See, for example, applicants' specification at p. 85, 1. 23 through p. 88, 1. 8 and FIGS. 44-46. Applicants respectfully submit that Vallone does not show or suggest each and every element of any of new claims 69-98. Therefore, new claims 69-98 should be found allowable over Vallone

IX. Conclusion

In view of the foregoing, this application is in condition for allowance. Reconsideration and allowance of this application are respectfully requested.

Respectfully submitted,

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